Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

NOTE ON A CIRRIPEDE OF THE CALIFORNIA MIOCENE, WITH REMARKS ON FOSSIL SHELLS.

BY T. A. CONRAD.

BALANUS.

H. Estrellanus, Con.

This fossil of the Californian Miocene, *Tamiosma gregaria*, Conrad, I supposed at one time to be a member of the *Rudistæ*, and I also described it as *Balanus estrallanus;* but not satisfied that, as one of the *Rudistæ*, it should be in the Miocene formation, I have further studied its characters, and now conclusively refer it to the *Balanidæ.* The only difference I can find to distinguish it, except specifically, from other species of the genus *Balanus* is that its basis is filled the entire length with septa. These septa do not essentially differ from those of *Balanus lævis*, Brug. In the only specimens found, the opercular valves are wanting, but a portion of the basis on which they rested is well preserved, and shows the same kind of surface as in other *Balani.*

HELIX.

H. Strangulata, Adams.

A very perfect specimen of this species is in the collection of the Academy of Natural Sciences, which I obtained at Yorktown, Virginia, while collecting Miocene fossils at that locality, although I do not recollect whether I found it in the marl or on the surface, probably the latter. It cannot be proved to be a Miocene fossil.

INOCERAMUS, Sow.

This genus is distinguished from *Haploscapha* (*Catillus*, Brong.) by a straight hinge line and the crenulations on the hinge, partly internal; while *Haploscapha* has an irregular or waved hinge, the right valve being alate about the beaks and having a sinus posteriorly, as represented in D'Orbigny's figure, pl. 412, of his "Paleon. Franc." The ligament is wholly external, situated in crenulations more numerous than in *Inoceramus*, and often in an irregular line. Pictet describes *Inoceramus* as "lamelleux," and says "La principale différence qui existe entre ces coquilles et celles des Inocérames consiste dans la structure du test, qui chez les Catillus est fibreux dans sa couche externe, repellant presque celui des TRICHITES." Mr. Meek adopts *Catillus* as a subgenus of *Inoceramus* without stating a distinguishing character, but I cannot find one species of *Catillus* among those he describes as species of it excepting *I. deformis*. One characteristic difference between the two genera is the extremely thin shell of *Catillus* over the middle portion of the disk and the gradual thickening towards the margin; indeed, the shell of the two species I have described is so thin that it has only been preserved entire by the adhesion of multitudes of *Ostrea congesta* on the back. This thinness is not in consequence of any loss of the original test, for the pearly layer is well preserved. Dr. C. A. White has given a figure of *I. deformis*, Meek, which is a true *Catillus*, as a section of the shell shows. "Report upon Geog. and Geolog. Explor., pl. xv., fig. 1." Catillus attains a far larger size than *Inoceramus*, and is known only in the chalk. Although the interior of the valves is well preserved, no trace of a muscular impression is seen. The laminated structure of *Inoceramus*, where the shell is preserved, will readily distinguish it from the coarsely fibrous structure of *Haploscapha* (*Catillus*).

The latter originated near the close of the chalk period, while the former is found in the lias as well as in the chalk.

APHRODINA, Conrad.

Mr. Meek makes this cretaceous genus a subgenus of *Callista*, which I think an error. *Callista* did not exist in the cretaceous period, nor *Dosiniopsis*.

IDONEARCA, Conrad.

I make the same objection to Mr. Meek's retaining this cretaceous genus as a subgenus of *Cucullæa*. It is a large group of fossil shells, which can be instantly known by the hinge character, and which disappeared entirely at the close of the cretaceous period.

MUTELIDÆ.

HAPLOTHÆRUS.

This extinct genus was the forerunner of *Columba*, Lea (*Leila*, Gray), to which it is nearly allied, the typical species having much resemblance in outline to *Columba Blainvilleana*, Lea, but wants the cardinal tooth of that genus. The hinge more nearly resembles that of *Columba* (*Leila*) *castelnaudi*, Hupé, but the anterior muscular impression is very different from that of *C. castelnaudi*. *Columba*, Lea, takes precedence of *Leila*, Gray, according to date of publication.

ANCHURA.

In the Geology of North Carolina, by Prof. Kerr, I have inadvertly referred *Anchura pennata*, Morton, to his *Rostellaria rostrata*, pl. 2, fig. 28. *Arene Carolinensis* of the same work is erroneously referred to plate 2, fig. 19. It should be pl. 1, fig. 19.

ETEA, Conrad.

To this genus must be transferred *Crassatella monmouthensis*, Gabb; *C. transversa*, Gabb; *C. Delawarensis*, Gabb; and *C. prora*, Con.; all of which were described from casts without knowledge of the hinge characters.